#README

The following is a description of each script and an order in which you run the code according to report (Section Experimental Results->Gradient Boosting):

1. Generalizationerror.m- plots generalization error
2. CV\_25\_mns\_mls.m – conducts cross validation for 25 values of MaxNumSplits and 25 values of MinLeafSize
3. Cv\_mns\_mls\_scaled.m – conducts cross validation for 6 values of MaxNumSplits and 6 values of MinLeafSize (modified version of [2] to use for normalized data)
4. CV\_numtree\_lr.m – conducts cross validation for numtrees and learning rate
5. CV\_numtrees\_lr\_subsampling.m – conducts cross validation for different values of number of trees, learning rate, and resample fractions
6. Metrics\_150tree\_wLR.m – plots MSE, MAE, RMSE, and R^2 for training data and test data for best value of Learning Rate(results from CV\_numtrees\_lr\_subsampling) over 150 trees
7. Metrics\_LR\_500trees.m – plots the metrics for training data and test data for different values of learning and 500 trees
8. Partialdependenceplots.m – plots single variable dependence plot and two-variable partial dependence plot